

# A Catalogue of the Birds in the Collection of the Bombay Natural History Society—2

## Anseriformes

BY

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[continued from Vol. 65 (1) : 199]

This instalment covers 459 specimens of the Anatidae (Ducks, Geese, and Swans) up to Register No. 22981. Though it is probable that more ducks than any other kinds of birds are shot every year in India, good series of several species of duck are not available. No special efforts have been made to obtain such specimens and many of them, particularly of the swans and geese, are heads and roughly prepared skins sent by sportsmen either for identification or for confirmation of records. It is hoped that members, particularly in northern India, will keep this in mind and try and preserve specimens to establish the correctness of some of the records and to make the collection more complete. Small series of the resident species (Spotbill, Nakta, Cotton Teal, etc.) from different parts of the country would also be of value. Arrangements for skinning birds for the Society exist at New Delhi, Calcutta, and of course in Bombay, and offers from other places can also be examined.

75 **Branta ruficollis** (Pallas) (Lower Ob, Southern Russia) Siberian Redbreasted Goose 6 : 407  
nil.

Stuart Baker and Mandy both saw this species on the Brahmaputra in Assam, but no specimen appears to have been obtained in India. Vaurie (p. 93) omits it for our area.

EL **Anser fabalis fabalis** (Latham) (Great Britain) Bean Goose  
2 : 1 ♂, 1 ♀ *Denmark*.

76 ? **Anser fabalis middendorffi** Severtzov (Oudskoi Ostrog) Bean Goose (of which one form is the Pinkfooted Goose) 6 : 404.  
nil.

77 ? *Anser fabalis rossicus* Buturlin (West Siberian Tundra) Tundra  
Bean Goose  
nil.

Neither subspecies has been definitely recorded from Indian limits, though the former was reported from Burma (FAUNA 6 : 404)

77a *Anser fabalis neglectus* Sushkin (East Russia) Sushkin's Goose  
6 : 403

Specimen No. 15292 ♂? Imphal, Manipur, Assam, recorded as *Anser neglectus*, has the wing 467, tarsus 70, and bill 63. The bill has a black tip to both upper and lower mandibles, and the black at the base of the upper mandible extends beyond the nostrils.

According to BR. HANDBOOK (3 : 197) '*A. f. neglectus* has a slender pink bill and pink feet and may be a fairly frequent individual variation or localized in a breeding area not yet discovered'.

In a footnote Ripley (p. 25) refers to Sushkin's Bean Goose, *A. f. neglectus*, being recorded from Assam, and adds that this is now considered merely a colour phase of the mixed population *fabalis rossicus*, presumably referring to two subspecies *fabalis* and *rossicus*.

78 *Anser fabalis brachyrhynchus* Baillon (France) Pinkfooted Goose  
6 : 401

1 ♂ Denmark (Reg. No. 22171).

Wing 433; bill 49; tarsus 70

There appears to be no satisfactory evidence as yet for the occurrence of this bird in Indian limits, the last 'authentic' record being a wrongly identified *Anser albifrons* from Bikaner (see Abdulali, JBNHS 63 : 198).

79 *Anser albifrons albifrons* (Scopoli) (North Italy) Whitefronted  
Goose  
6 : 399

5 : 4 heads only; 1 immature.

3 *Mesopotamia*; 1 Imphal, Manipur; 1 Bikaner, Rajasthan.

The last specimen (Reg. No. 15293) was originally identified as *A. f. brachyrhynchus*.

80 *Anser erythropus* (Linnaeus) (North Sweden) Lesser Whitefronted  
Goose  
6 : 401

2 : 1 ♂ 1 ♀?

1 *Mesopotamia* (registered as *albifrons*); 1 Bahawalpur, West Punjab.

81 *Anser anser rubrirostris* Swinhoe (Shanghai) Greylag Goose 6 : 398

15 : 1 ♂ 4 ♀ 10 ♀? 2 albinoid; 2 pull.; 6 heads and necks.

2 *Mesopotamia*; 4 Shiraz, Persia (2 adults with clipped wings and 2 pull.); 1 Kabul River, Peshawar; 1 Punjab; 2 Kashmir (albinoids); 2 Sind; 1 Mandvi (Kutch?); 2 no data.

In the absence of any suitable range of specimens, it is not possible to name any of them racially. The two white birds, both from Kashmir, include No. 15297 from Haigham Jheel, Srinagar, which was recorded as *Anser hyperboreus* (= *caerulescens*) and the present identification has resulted in the removal of this species from the Indian list (see Abdulali, *JBNHS* 63 : 198).

82 *Anser indicus* (Latham) (India) Barheaded Goose 6 : 405

6 : 3 ♂♂ 1 ♀ 2 o? 1 pull.\*

1 Chitral\* ; 2 Jabalpur, M.P. ; 2 Crawford Market, Bombay ; 1 Tungabhadra, Mysore.

83 *Anser caerulescens caerulescens* (Linnaeus) (Hudson Bay) Snow Goose

Specimen No. 15297 which is an albinoid *A. a. rubrirostris* was recorded as *A. hyperboreus* Pallas. This species is now removed from the Indian list (see Serial 81 above).

84 *Cygnus columbianus bewickii* Yarrel (Yarmouth, England) Bewick's or Whistling Swan 6 : 381

6 : 1 ♂ 5 o? 1 juv.\* ; 2 juv. heads ; 1 leg only.

1 ♂ Denmark ; 1 Mardan, N.W.F.P. ; 2 Dora Momin, Kabul River ; 1 leg, Jacobabad ; 1 Rajpur, Delhi\*.

There has been much confusion regarding the identification of some of our swans and geese, mainly due to lack of definitely identified material for comparison. A few specimens recently received in exchange from the Copenhagen Museum have permitted a more critical examination and I hope that my readjustments are correct. The two heads (juv.) obtained by Col. Magrath on the Kabul River in Peshawar District in 1910 were named *Cygnus cygnus* and are recorded in the FAUNA under this name. Their bills, from gape 88 and 94, compare better with the three others of this form (83, 85, and 88) rather than *C. cygnus* [101, 102, 105 (2)] and the yellow of the bill does not extend as far forward as the nostrils. The tops of their heads are also more like the juvenile of this species rather than of *cygnus*.

The label on the Jacobabad leg is marked *C. jankowskii*, while it was recorded by Stuart Baker as *bewickii* *JBNHS* 23 : 456.

85 *Cygnus columbianus jankowskii* Alpheraky (Ussuriland) 6 : 382

2 : 1 ♂ 1 o?

1 Campbellpur, Attock, Punjab ; 1 Kutch.

The wings measure 530 and 550, against 545, 505, and 512 in *bewickii*; the bills from gape are about equal to the last form but the feathers of the forehead commence further back and the bills measure 107 and 99 against 86-90(2) in the others.

Though there is an apparent difference in the size of the bill, it may be noted that Vaurie (1965 : 107 footnote) confirms the earlier finding of Tugarinov (1941, Fauna USSR., Ptitsy, 1, pt. 4, p. 117) that this is not a valid race.

86 *Cygnus cygnus* (Linnaeus) (Sweden) Whooper Swan 6 : 380

4 : 1 ♂ 1 o? 2 heads only ; 1 grey plumage.\*

1 Denmark ; 1 Khetri, Jaipur, Rajasthan\* ; 1 River Beas, Punjab ; 1 Sind (?).

Except for Hodgson's specimens from Nepal (1829) these specimens appear to cover all known Indian records of this species.

87 *Cygnus olor* (Gmelin) (Russia) Mute Swan 6 : 383

7 : 1 ♂ 1 ♀ 5 o? 1 imm. ; 4 heads only.

1 Denmark ; 1 Persian Gulf ; 1 Persia ; 1 N.W.F.P. ; 2 Punjab ; 1 Sind.

The two from Persian Gulf and Persia have their tarsi 78 and 85 against 102 in the ♂ from Denmark.

88 *Dendrocygna javanica* (Horsfield) (Java) Lesser Whistling Teal, Tree Duck 6 : 411

21 : 7 ♂♂ 8 ♀♀ 6 o? 1 ch.

2 Rajputana ; 1 Gwalior ; 2 Kymore, M.P. ; 6 Bombay, 1 Bombay Market ; 1 Karwar ; 1 Ceylon ; 2 Darbhanga, 2 Baghowni, Bihar ; 1 Calcutta Market, Bengal ; 1 Goalpara, 1 Sylhet, Assam.

One from Sylhet, Assam, has an irregular band of white across the breast continuing on to the shoulders of the wing and including the primaries. Fresh skins are much darker above than old ones, the black of the head fading into brown. Young birds have a more greyish wash and are less brown below.

A specimen of *D. fulva* (now *bicolor*) though correctly named on the label was listed with this species.

89 *Dendrocygna bicolor* (Vieillot) (Paraguay) Large Whistling Teal 6 : 413

1 ♂ Calcutta Market (5 Nov. 1899).

90 *Tadorna ferruginea* (Pallas) (Tartary) Ruddy Sheld-duck, Brahminy Duck 6 : 416

8 : 4 ♂♂ 2 ♀♀ 2 o? 1 ch.

1 Amara, Iraq ; 1 Aliabad, Shiraz, Iran ; 1 Parman, Ladak\* ; 1 Ghoti, 2 Bombay Market, Maharashtra ; 1 Kheri, 1 Pilibhit, U.P.

The bills (from feathers) are smaller than indicated in the FAUNA : [4 ♂♂ 41.46 av. 44 (58-68) ; 2 ♀♀ 39.42 av. 40.5 (54-60)]

91 *Tadorna tadorna* (Linnaeus) (Sweden) Common Sheld-duck 6 : 414

15 : 2 ♂♂ 3 ♀♀ 10 o? Several in immature plumage.

1 Norway; 1 Baghdad\*; 1 Basra, Iraq; 1 Aliabad, Shiraz, Iran; 2 Baluchistan; 2 Sind; 1 Jamnagar, Gujarat; 1 Baghowni, Bihar; 1 Calcutta, 1 Calcutta Market, Bengal; 2 Burma; 1 Tientsin, China.

As in the last species, the bills are smaller than indicated in the FAUNA.

92 *Anas angustirostris* Menetries (Lenkoran, Transcaspia) Marbled Teal 6 : 445

11 : 6 ♂♂ 3 ♀♀ 2 o?

2 Iraq; 1 Ferozepur, Punjab; 5 Sind; 2 Gujarat; 1 Ahmednagar, Maharashtra.

In this small series, the wings are smaller than suggested by the FAUNA : 6 ♂♂ 197-208 av. 203 (206-215); 3 ♀♀ 198-200 av. 199 (198-210).

93 *Anas acuta* (Linnaeus) (Sweden) Pintail 6 : 437

17 : 6 ♂♂ 8 ♀♀ 3 o? 3 albino.

1 Mesopotamia; 1 Persian Gulf; 1 Shiraz, Iran; 1 Chitral, N.W.F.P.; 1 Sind; 1 Kutch; 1 Gujarat; 1 Panvel, 1 Nasik, Maharashtra; 1 Bihar; 3 Calcutta Market, 1 Gangpur State, Bengal; 2 Assam; 1 Tsingtau, China.

Some of the females have unmarked underparts while others are heavily spotted. Specimen No. 15441 (Calcutta Market) is a partial albino with greatly reduced markings washed with pale brown on the upperparts. Two other albinos (No. 15443-4) show some differences in the proportions of their bills, but all the measurements are within the range noted for the species.

94 *Anas crecca crecca* Linnaeus (Sweden) Common Teal 6 : 431

20 : 13 ♂♂ 5 ♀♀ 2 o? 1 head only\*.

1 Emden, Germany; 2 Mesopotamia; 1 Iran; 1 Quetta, Baluchistan\*; 3 Sind; 2 Chitral; 1 Kashmir; 1 Delhi; 2 Calcutta Market; 3 Ghoti, Maharashtra; 2 Burma; 1 Peking, China.

\*The head displays gynandromorphism, in the form of the rufous and green eye-patch of the breeding male on one side and the female or winter plumage on the other (see Sálím Ali, *JBNHS* 44 : 127-130).

An excellent character by which it appears possible to separate this species from *Anas querquedula* is that the shafts of the primaries are brown against pure white in *querquedula*.

95 *Anas formosa* Georgi (Lake Baikal, Siberia) Baikal or Clucking Teal. 6 : 433

11 : 3 ♂♂ 2 ♀♀ 6 o?

1 Dungagali, N.W.F.P.; 1 Bhimasar, Kutch; 1 Juhar, Ahmedabad; 1 Bankipur, Patna, Bihar; 4 Assam; 2 Tientsin, 1 Peking, China.

One in female plumage was registered under *Anas querquedula* and another under *Nettion albogularis*, both from Assam.

The legs and feet of all the specimens appear as if they were originally red or orange.

The trivial name means 'pretty' from the Latin *formosus* (Delacour & Scott, WATERFOWL OF THE WORLD 2 : 103) and the name Formosa Teal, often applied to this species, is unwarranted.

96 *Anas gibberifrons albogularis* (Hume) (Andamans) Grey Teal  
6 : 435

7 : 2 ♂♂ 4 ♀♀ 1 o?

3 Port Blair, South Andamans ; 4 Betapur, Middle Andamans.

For remarks on validity of Fleming's *leucopareus* from North Reef and Middle Andaman Islands, see Abdulali 1967 (*JBNHS* 64 : 154).

97 *Anas poecilorhyncha poecilorhyncha* Forster (Ceylon) Spotbill  
Duck 6 : 421

9 : 2 ♂♂ 2 ♀♀ 5 o? 1 albinoid.

1 Sirsa, Punjab ; 3 Bharatpur, Rajasthan ; 2 Daman, Gujarat ; 2 Nasik, Maharashtra ; 1 Upper Assam.

Wing 253-291 ; bill 55-61.

According to the FAUNA, the young are like the adults but with no red spots on the bill. Specimen No. 25356 from Sirsa, Punjab, has distinct red spots though it is not yet fully grown—bill 47 (next smallest measurement : 52) and wing 246 (248). The rump is also paler than in the adults and the head slightly but distinctly streaked—both apparently good characters of juvenility as supported by specimens of other races. Mr. M. J. S. Mackenzie of Chabua, Lakhimpur, Upper Assam, informs me (*in epist.*) that he had seen traces of red spots in three-week chicks.

The feathers of the forehead terminate in a point in some birds and in a short straight line in others. It has not been possible to associate this character with age or sex, but an examination of a larger and correctly sexed series may perhaps explain it.

98 *Anas poecilorhyncha haringtoni* (Oates) (Shan States) 6 : 423

9 ; 1 ♂ 1 ♀ 7 o?

8 Taungyi, Southern Shan States ; 1 Fort Stedman, Burma.

This race was separated from the nominate form mainly because of the absence of the red spots and the shorter bill. The latter character is omitted in the FAUNA, but the specimens available, mostly unsexed, have wings 248-274 and bills 50-56.

The fleshy spots at the base of the bill are distinctly present in some specimens, though now they all appear black, and not red. In the BIRDS OF BURMA, p. 551, it is stated that the position of the different races in Burma is not clear. Hopwood (*JBNHS* 18 : 498) said that all but one of a dozen shot on the Upper Chindwin had black patches at

the base of the bill while the exception (15th February) was pure orange. At the end of October in the same place 4 had orange patches with black centres. Is it possible that in Burma the colour changes seasonally? There is no evidence or suggestion that this is so in Indian birds. In preserved specimens also, the red spots are distinct in the oldest skins.

99 *Anas poecilorhyncha zonorhyncha* Swinhoe (Ningpo, China) Grey Duck 6 : 422

3 : 1 ♂ 2 o ?

1 Pasighat Sadiya, Frontier ; 2 Chabua, Upper Assam (see *JBNHS* 63 : 438-440).

100 *Anas platyrhynchos* Linnaeus (Sweden) Mallard 6 : 419

9 : 7 ♂♂ 2 ♀♀.

4 Chitral, N.W.F.P. ; 1 Sind ; 1 Bombay Market ; 1 *Upper Chindwin* ; 1 *Bhamo, Burma* ; 1 *Tientsin, China*.

While the wing measurements are in keeping with those in the FAUNA and BR. HANDBOOK the bills in both sexes appear to be larger than suggested therein :

7 ♂♂ 53-60 av. 56 (50-57 FAUNA ; 50-56 HANDBOOK)

2 ♀♀ 52-53 av. 50.5 (44-55 ; 43-52)

This is confirmed to some extent by Ticehurst (Birds of Sind, *Ibis* 1923 : 446) who measured 'males 50-60.5 (mostly 54-58), females 47-55'.

In addition to the above, the collection includes a specimen (No. 15473) from Srinagar, Kashmir, which is very like a drake mallard but has a spatulate beak, and a green-purple speculum. It is marked as a hybrid between a mallard and a shoveller.

101 *Anas strepera strepera* (Linnaeus) (Sweden) Gadwall 6 : 426

16 : 10 ♂♂ 4 ♀♀ 2 o ? 1 juv.\* ♀ ; 1 albino.

6 *Mesopotamia* and *Persian Gulf* ; 1 *Shiraz\**, *Iran* ; 3 Sind ; 1 Gujarat ; 3 Kolaba, 1 North Chanda, Maharashtra ; 1 Saran, Bihar.

The males are noticeably larger than the females, and have their wings 257-275 av. 268. These measurements are nearer those in the BR. HANDBOOK (3 : 244) 260-282 than in the FAUNA 270-285. The albino from Basra, Iraq, marked ♀ (wing 230), has her bill proportionately larger (44) and narrower (14) than in any of the others.

Specimen No. 15384 from Kashmir marked as a hybrid gadwall/mallard is not included above<sup>1</sup>.

102 *Anas falcata* Georgi (Asiatic Russia) Falcated Teal 6 : 424

20 : 9 ♂♂ 5 ♀♀ 6 o ? 1 head only.

♂♂ wing 243-266 av. 253 ; bill 41-47 av. 44.

<sup>1</sup>The five hybrid ducks in the collection are being separately reported on by Dr. J. Harrison in a later issue of the *Journal*.

♀ wing 226-259 av. 238 ; bill 37-43 av. 40.

1 Rawalpindi, 1 Jullundur, 3 Karnal, Punjab ; 1 Sind ; 1 Delhi ; 4 Roorkee, 1 Gonda, 1 Jogwala Jheel, Lhaskar, U.P. ; 2 Calcutta Market ; 1 Imphal, Manipur, 1 Chabua, Upper Assam ; 2 *Peking*, 1 *Tientsin*, *China*.

In Birds of Mesopotamia, *JBNHS* 28 : 331, a bird shot by Thornhill but not preserved is mentioned but the record is omitted in recent literature. H. S. Wood in MILESTONES OF MEMORY (1950) p. 145 refers to one shot in Mesopotamia during World War I ; I do not know if this is the same or another instance.

The collection contains two other birds (No. 15474 Imphal, Assam, and 15479 Calcutta Market) which are similar to the males of this species except that bills widen at the tip to varying extents and are 55 and 53 mm. long. One of them is marked in Sálím Ali's handwriting 'Bronze-capped Teal-Shoveller hybrid—Identified by E. C. Stuart Baker, who cannot explain the presence of chestnut on wings (His letter d/26.6.26)'. This letter is not now available.

103 *Anas penelope* Linnaeus (Sweden) Wigeon 6 : 429

25 : 12 ♂♂ 7 ♀♀ 6 o? 1 albinoid.

1 *Germany* ; 1 *Mesopotamia* ; 3 *Iran* ; 2 Chitral, N.W.F.P. ; 3 Punjab ; 6 Sind ; 2 Nasik, 1 Panvel, Maharashtra ; 1 Delhi ; 1 Roorkee, 1 Dhanari, U.P. ; 2 Calcutta Market ; 1 *Upper Burma*.

The males have wings larger (248-261 av. 254) than the females (232-244 av. 238) but their bills are 32-37 and 31-36 both averaging 33.

A male from Roorkee, U.P., (No. 15403), is a partial albino having pale brown markings on the upper surface and being all white below.

104 *Anas querquedula* Linnaeus (Sweden) Garganey 6 : 439

22 : 10 ♂♂ 6 ♀♀ 6 o?

2 Rawalpindi, Punjab ; 2 Sind ; 2 Bharatpur ; 2 Daman, Gujarat ; 4 Ghoti, 2 Bombay, Maharashtra ; 4 Calcutta Market ; 1 Alleppy, Kerala ; 2 *Lower Burma* ; 1 *Yarkand*, *China*.

Specimen No. 15456, unsexed, from Daman, Gujarat, has its bill from feathers 39 mm. long and which is very similar in shape to that of *A. crecca* as which it was originally registered. It has, however, blue shoulders and white shafts to the wing quills which render the present identification fairly certain.

105 *Anas clypeata* Linnaeus (South Sweden) Shoveller 6 : 442

18 : 8 ♂♂ 8 ♀♀ 2 o?

2 *Mesopotamia* ; 1 *Persian Gulf* ; 2 Chitral, N.W.F.P. ; 1 Srinagar, 1 Garampani, Kashmir ; 1 Sind ; 2 Kharaghoda, Gujarat ; 1 Rewassa, Rajputana ; 5 Nasik, Maharashtra ; 2 Calcutta Market.

Five males with white upper breasts (24th December, January (2), March and 'April-August') are apparently in breeding plumage but, though the sides of the head and neck are glossed with green, this colour



is absent at the top of the head. According to the FAUNA the whole head and neck is glossy green, but Delacour (WATERFOWL OF THE WORLD 2 : 187) says 'head metallic green, blackish on the crown, the face and the foreneck'.

106 *Rhodonessa caryophyllacea* (Latham) (India) Pinkheaded Duck 6 : 390

5 : 3 ♂♂ 1 ♀ 1 o ?

1 Palia, north of Kheri District, U.P. (1921); 1 Darbhanga, Bihar (1903); 1 Alipore Zoo (1897); 1 Calcutta Market (1899); 1 *Sinju Kulag, Mandalay District, Upper Burma* (1909).

Burma is excluded from the range of this species, now believed to be extinct, in the SYNOPSIS, but the above specimen was recorded (JBNHS 19 : 264) and there are earlier records from Arakan and Bhamo.

107 *Netta rufina* (Pallas) (Caspian Sea) Redcrested Pochard 6 : 448

17 : 7 ♂♂ 7 ♀♀ 3 o ?

1 *Persian Gulf*; 1 *Mesopotamia*; 1 *Shiraz, Persia*; 1 Rawalpindi, N.W.F.P.; 5 Sind; 1 Ahmednagar; 1 Vizianagram, south India; 1 Rajputta Saran, Bihar; 2 Calcutta Market; 1 Gauhati, Assam; 2 *Mandalay, Burma*.

The bill in some specimens, particularly males, appears to taper more prominently than in others.

108 *Aythya ferina* (Linnaeus) (Sweden) Common Pochard 6 : 450

15 : 8 ♂♂ 5 ♀♀ 2 o ?

1 *Mesopotamia*; 1 Rawalpindi, N.W.F.P.; 1 Jhalwar, Rajputana; 1 Indore, Central India; 1 Saugor, Madhya Pradesh; 2 Saran, Bihar; 3 Nasik, 2 Thana, 1 Bombay Harbour, Maharashtra; 2 Calcutta Market.

	Wing	Bill	
♂	200-215 av. 207 (210-225)	47-52 av. 49	} (43-50)
♀	199-201 av. 200 (200-213)	45-47 av. 46	

109 *Aythya nyroca* (Guldenstadt) (S. Russia) White-eyed Pochard 6 : 453

16 : 7 ♂♂ 5 ♀♀ 4 o ?

3 *Persian Gulf*; 1 *Aliabad, Iran*; 1 Nowshera, N.W.F.P.; 1 Larkana, Sind; 1 Ghoti, Nasik, 1 Greater Bombay, Maharashtra; 1 Saugor, Madhya Pradesh; 1 Meerut, U.P.; 3 Calcutta Market; 3 Assam.

The bills in 6 males measure 38-43 av. 41 (4 females 39-42 av. 40) against 27-30 in the FAUNA and 40-43 in BR. HANDBOOK (3 : 292).

Specimen Nos. 15529 (Calcutta Market) and 15332/3 (Imphal, Assam) differ in having no pure white on the underparts, this being replaced by a greyish brown, many of the feathers (almost entirely in one) having whitish margins. The only bird sexed, a male, shows signs of typical reddish brown on the head and upper breast. This is apparently a sub-adult plumage of which there does not appear to be any mention in the standard literature available to us.

110 **Aythya baeri** (Radde) (upper Salbatch Plain, middle Amur River, Siberia) Baer's Pochard 6 : 454

4 : 3 ♂♂ 1 ♀.

2 Calcutta Market ; 1 Manipur, Assam ; 1 Peking, China.

The males have their wings 208 (2) 209 (208-240), and the female 198 (193-215) and the bills 46-47 (2) in the males and 41 in the female, against 39-42 in the FAUNA, presumably for both sexes.

In addition to the dark head, both sexes are noticeably larger than *A. nyroca*.

Specimen No. 15534, a female from Patao, Upper Burma, listed in this species is paler all over and has been identified as *N. fuligula* by Dr. Ripley to whom it was sent.

111 **Aythya fuligula** (Linnaeus) (Sweden) Tufted Duck 6 : 458

17 : 6 ♂♂ 9 ♀♀ 2 o?

1 Pithoro, Sind ; 1 Viramgam, Gujarat ; 2 Bharatpur, Rajasthan ; 1 Agra, U.P. ; 1 Gwalior ; 2 Ghoti, 2 Thana, 1 Ratnagiri, Maharashtra ; 1 Jeypore, Orissa ; 2 Calcutta Market ; 1 Patao, Upper Burma, 1 Prome District, Burma ; 1 Tientsin, China.

112 **Aythya marila marila** (Linnaeus) (Lapland) Scaup Duck 6 : 456

2 : 1 ♂ 1 o?

1 Imphal, Manipur ; 1 Ahmednagar, Maharashtra.

The male from Imphal (No. 15539) has its wings 203 (♂ 220-230 ; ♀ 210-220. BR. HANDBOOK 3 : 307) and the other, which is very similar in appearance, 215 mm. The vermiculations on the upper surface are also vestigial and very different from those shown in the plate in BR. HANDBOOK. Accordingly both were sent to Dr. Ripley, who confirms that they are of the nominate form.

113 **Aix galericulata** (Linnaeus) (China) Mandarin Duck 6 : 394

2 : 1 ♂ 1 ♀ Imphal, Manipur, Assam.

This pair, which were among 4 birds shot and recorded in *JBNHS* 37 : 490 are omitted in the SYNOPSIS.

Both birds have larger wings, ♂ 244 (223-240) and ♀ 225 (170-197) than indicated in FAUNA though Delacour (1959, THE WATERFOWL OF THE WORLD 3 : 106) measures females 217-230.

114 **Nettapus coromandelianus coromandelianus** (Gmelin) (Coromandel, India) Cotton Teal 6 : 392

26 : 15 ♂♂ 8 ♀♀ 3 o? 1 albino\*. 1 juv.

2 Kutch ; 1 Ahmedabad, 2 Daman, Gujarat ; 1 Dhar, Central India ; 9 Thana, 1 Khandala, Maharashtra ; 1 Saugor, 1 Kanker, Madhya Pradesh ; 1 Yellapur, N. Kanara ; 1\*Madras ; 1 Baghowni, Bihar ; 2 Calcutta Market, Bengal ; 1 Kheri, U.P. ; 1 Ataran, 1 Little Tenasserim, Burma.

The males have wings (153-172 av. 162) slightly larger than the females (151-160 av. 156.6) but the bills in both sexes range from 21-24 barely averaging larger in the males.

Blanford (4 : 433) referred to a summer-winter plumage in males, but Stuart Baker described the former as an adult plumage and made no reference to seasonal changes. From the series available there can be little doubt that the 'final' plumage with black breast band, vermiculations at the sides, and black undertail coverts represents a breeding plumage acquired in March/ April and discarded by December or probably earlier. At this time only the white patch and the green on the wings separate them from the females.

A young male (19th February) is very like a female while another (3rd March) has acquired a little green on the upper-parts.

**115 Sarkidiornis melanotos melanotos** (Pennant) (Ceylon) Nakta, Comb Duck 6 : 385

13 : 5 ♂♂ (3 by size and plumage) 5 ♀♀ 3 o ?

2 Sind ; 1 Mahikanta, 2 Bhuj, Kutch, Gujarat ; 1 Dhar, C. I. ; Handa, M.P. ;

3 Nasik, 1 Kolhapur, Maharashtra ; 1 Baghowni, Bihar ; 1 Calcutta Market.

The measurements, particularly of the bills, differ from those in the FAUNA :

Wing	Bill
♂ 335-370 av. 353 (339-406)	52-60 av. 55 (63-70)
♀ 293-305 av. 298 (280-309)	44-48 av. 47 (59-66)

**116 Cairina scutulata** (S. Muller) (Java) Whitewinged Wood-Duck 6 : 387

10 : 4 ♂♂ 3 ♀♀ 3 o ?

1 Dibrugarh, 2 Sadiya, 2 Chungki, Manipur, 5 Burma.

In the small series some of the measurements are a little different from those in the FAUNA :

Wing	Bill
♂ 321-375 av. 343 (363-401)	59-66 av. 62 (58-66)
♀ 315-341 av. 329 (305-356)	58-61 av. 59

In view of the general paucity of information regarding the breeding habits of this bird (only one egg is referred to in NIDIFICATION) the following from Wood's SHIKAR MEMORIES (1934, p. 183) may be worth quoting : 'Close to one of the deserted tanks in heavy forest [near Dimapur, Sibsagar, Assam—H.A.], I saw an old tree bare of everything and in it there were six nests of the Wood-duck. Several were sitting at the time. Those eggs would be worth a lot of money now !'

117 **Clangula hyemalis** (Linnaeus) (Northern Sweden) Longtail or Old Squaw Duck

2 : 1 ♂ 1 ♀ (by plumage).

1 Chaman, Baluchistan ; 1 Drig, Larkana, Sind.

The male's wing is 211 against 219-236 in BR. HANDBOOK (3 : 323).

118 **Bucephala clangula clangula** (Linnaeus) (Sweden) Goldeneye Duck  
6 : 460

6 : 1 ♂ 5 ♀♀ (4 by plumage).

1 20 miles from Babylon ; 1 Margil, Basra, Mesopotamia ; 1 Kalabagh, Mianwali, 1 Jhelum, Punjab ; 1 Roorkee, U.P. ; 1 Tientsin, China.

The five females have their wings 189-202 av. 195, slightly smaller than 197-213 in FAUNA and 197-210 in BR. HANDBOOK (3 : 313).

119 **Mergus albellus** Linnaeus (Mediterranean Sea near Smyrna) Smew  
6 : 466

15 : 4 ♂♂ 7 ♀♀ 4 o ?

2 Mesopotamia ; 1 Shiraz, Iran ; 5 Sind ; 1 Gujarat ; 1 Meerut, U.P. ; 1 Monghyr, Bihar ; 3 Peking Market, 1 North China.

Among the females and unsexed specimens some appear to have smaller wings (under 180 mm.) and bills (25-26) than others (wings 180-204 ; bills 28-30). Though more of the smaller ones appear to be from the east, I cannot associate them with any character of plumage or separate areas as would permit me to suggest a subspecific separation. Larger series may perhaps be examined to advantage.

120 **Mergus merganser merganser** Linnaeus (Sweden) Goosander, Common Merganser  
6 : 469

3 : 2 ♂♂ 1 ♀.

2 Peking, 1 Tientsin, China.

♂♂ wing 280-283.

\*121 **Mergus merganser comatus** (Salvadori) (Native Sikkim)

7 : 5 ♂♂ (2 by plumage) 1 ♀ \*2 heads only.

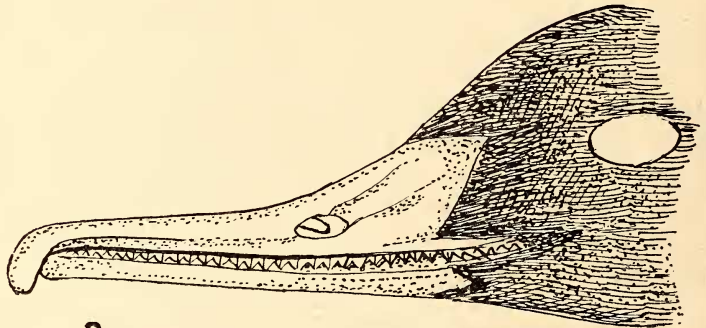
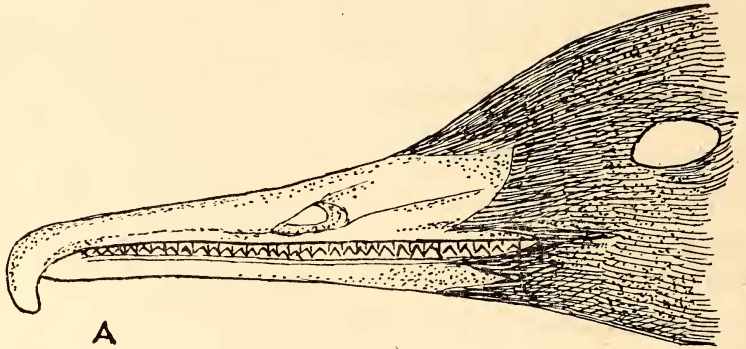
\*1 Dadapur, Ravi River, Punjab ; 1 Marshalong nr. Leh, 12,000', Kashmir ; \*3 Garhwal, U.P. ; 1 Gangpur, Bihar ; 1 Goalpara, Assam.

The ♂ wings 278-300 do not differ from those of the Chinese birds listed as of the nominate race, but the bills are distinctly different in shape (see sketch) and shorter. The latter is best indicated by a measurement from the notch in the feathering at the base—60-65 av. 61.4 against 68 and 69 in the others, which are also stouter.

Of the two females available, the head and the grey upper parts of the Garhwal bird are paler than those of the Chinese.

As this agrees more closely with Vaurie's version (pp. 140-142) of *comatus* rather than \**orientalis* Gould (accepted in FAUNA and SYNOPSIS but which Vaurie merges with the nominate form), I am accepting the Himalayan birds as *comatus*.

The bird from the Ib River, a tributary of the Mahanadi, was shot by the Ruler of Gangpur on 31 December 1958, out of a flock of some



fifteen birds. D'Abreau, *JBNHS* 38, p. 116, referred to one shot on the Mahanadi in the adjoining Raipur District, indicating that this species occurs further south than is generally accepted.

122 *Mergus serrator* Linnaeus (Sweden) Redbreasted Merganser

6 : 473

1 ♂? No. 15598 *Ormara, Mekran*. Wing 218 (moulting); bill 55.

2 females of *Mergus merganser* from China and Garhwal were listed under this species. As well illustrated in BR. HANDBOOK (3 : 337) the nostril is nearer the base of the bill than in *M. merganser* and this appears to be a useful and reliable character.

123 *Oxyura leucocephala* (Scopoli) (Probably from northern Italy) Whiteheaded Stiff-tailed Duck

6 : 463

16 : 3 ♂♂ 2 ♀♀ 11 ♂? 1 pull.\*

\*1 *Bahm-i-Shur Lake, Fars, Iran* ; 1 *Kashgar, China* ; 5 *Baluchistan* ; 3 *N.W.F.P.* ; 5 *Punjab* ; 1 *Sind*.

	Wing		Bill	
3 ♂♂	162-164	av. 163 (160-168)	45-47	av. 46 (46-49)
2 ♀♀	157-158	av. 157 (150-157)	43 (2)	(45-47)
10 ♂?	150-158		42-47	

(to be continued)